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EXAMINER	
KISWANTO, NICHOLAS	
ART UNIT	PAPER NUMBER
3665	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/544,098	BARKOWSKI ET AL.	
	Examiner	Art Unit	
	NICHOLAS KISWANTO	3665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 3/21/2011 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 12-14 and 16-35 rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. (2003/0195676), in view of Ellenby et al. (7,301,536).

As per claim 12, Kelly et al., 2003/0195676 teaches a vehicle monitoring system that includes a *computer system in a vehicle* (see Fig. 1, element 18 and Fig. 5 and abs., wherein "vehicle monitoring system for use with one or more vehicles of a business, which includes a computer system"), *comprising: at least two computers that*

perform different tasks (see Fig. 1, elements 14, 18 has shown clear evidence of two computers in the vehicle; and Fig. 2, element 18 for the first computer, and any of elements 14, 16, 17, 19 of figure 2, have been taken as the second computer which being considered perform different tasks)*, wherein: a distribution of the tasks among the at least two computers takes place according to a significance of functions for a driving of the vehicle* (see Fig. 2, elements 18, 14, 16, 17, 19, and Fig. 5, element 48; Note that cellular telephone 16, GPS 17, card reader 19, vehicle engine computer 14, are themselves separate computers. These separate computers located within the vehicle for performing different tasks, and are connected to main computer 18)*, the functions including driving-related functions that are implemented in a first computer of the at least two computers* (see Fig. 2, elements 16 and 17, being taken for driving and non-driving function, with respect to element 17, when the device is in motion it has been considered as driving related function)*, and non-driving-related functions that are implemented in a second computer of the at least two computers* (see Fig. 2, elements 16 and 17, have been taken as non-driving-related functions depend on the require function of the device).

However, Kelly is silent as to the specifics of at least one driving-related function is temporarily distributed to the second computer for execution.

Ellenby discloses a computer system in a vehicle where at least one driving-related function is temporarily distributed to a second computer for execution (col 6, line 59-64). Ellenby teaches that this is so the main CPU can perform its other tasks, which

would normally be underserved if the processor-intensive driving-related function is done (col 6, line 60-62).

It would have been obvious to one of ordinary skill in the art to provide Kelly with Ellenby in order to allow the main CPU to properly perform other tasks, as taught by Ellenby.

As per claim 13, Kelly et al., 2003/0195676 teaches a vehicle monitoring system *wherein the driving-related functions are vehicle-specific functions* (see Fig. 2, elements 16, 18 and 17, particularly elements 16 and 17 have been considered as having driving-related functions).

As per claim 14, Kelly et al., 2003/0195676 teaches a vehicle monitoring system that includes a *wherein the driving-related functions contain specific information connected with at least one of: one of an operation, a navigation, and a driving of the vehicle, a warning and an orientation of a driver* (see Fig. 2, elements 16 and 17)*, and the driving-related functions form a driver-related HMI*[1] *and a driver information system* (see Fig. 2, elements 16, 17 and Fig. 5, element 48 has been considered as means for having MHI logic function).

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[1] **Fully Integrated HMI.** Logic Developer-PC works seamlessly with the fully integrated CIMPLICITY Machine Edition View product, giving you the power of alarming, scripting, data logging, and recipe management. With the fully configured Web Server, you can view and control your plant using a standard Web browser.

As per claim 16, Kelly et al., 2003/0195676 teaches a vehicle monitoring system that includes a *wherein: the driving-related functions include at least one of the following functions: navigation systems* (see Fig. 2, element 17)*, one of an HMI logic system and an HMI manager that one of controls and evaluates a display and an operation of the vehicle* (see Fig. 2, element 17 and Fig. 5, element 48 has been considered as means for having MHI logic function an display)*, one of speech recognition software and speech synthesis software, a program for outputting one of driving instructions and driver warnings* (see Fig. 2, element 17, wherein inherently a GPS system being known for having text to speech function and speed warning *etc.*)*, and a representation of two-dimensional maps for orientation* (see Fig. 2, elements 16 and 17, inherently GPS has been known for as means for displaying two-dimensional maps)*, and the non-driving-related functions include at least one of the following functions: an Internet browser, a service download, a representation of three-dimensional graphics, an application for entertaining passengers, a game, a video reproduction system, a digital video broadcast system* (see Fig. 2, element 16, inherently a cell phone system being known having an Internet browser, a service download, a representation of three-dimensional graphics, an application for entertaining passengers, a game, a video reproduction system, a digital video broadcast); *and a connection of connectable portable devices including one of a laptop and a PDA* (see Fig. 5, wherein by design choice element 16, being considered a PDA; and element 48 has been considered as a laptop).

As per claim 17, Kelly et al., 2003/0195676 teaches a vehicle monitoring system that includes a *wherein the second computer is a powerful multimedia computer* (see Fig. 2, elements 14, 16, 17 and 19 have been considered as powerful multimedia).

As per claim 18, Kelly et al., 2003/0195676 teaches a vehicle monitoring system that includes a wherein *at least one interface provided between the first computer and the second computer* (see Fig. 5, element 31, wherein internal or not has been considered as interface between elements 18 and 48).

As per claim 19, Kelly et al., 2003/0195676 teaches a vehicle monitoring system that includes a *wherein the first computer is connected to an internal vehicle bus* (see Figs. 2 and 5 all the lines from element 18 have been considered internal bus).

As per claim 20, Kelly et al., 2003/0195676 teaches a vehicle monitoring system *wherein a computing-intensive function of a driving-related part are computed in a non-driving-related part* (see Fig. 2, element 16 and 17, as noted above).

As per claim 21, Ellenby et al., 7,301,536 further teaches the first computer gives computing-intensive tasks to the second computer, and the first computer executes the computer-intensive tasks if the second computer is not available (col 6, lien 59-60).

As per claim 22, Kelly et al., 2003/0195676 teaches a vehicle monitoring system that includes a *multimedia computer for use in a motor vehicle, wherein the multimedia computer implements entertainment functionalities and is connected via at*

least one interface with an additional computer that implements driving functions (see Fig. 2, elements 16, 18 and Fig. 5, element 48 and 49).

As per claim 23, Kelly et al., 2003/0195676 teaches a *computer system in a vehicle* (see Fig. 1, elements 14 and 18)*, comprising:*

a first processing unit configured to perform driving-related functions (see Fig. 2, element 18 and elements 16 and 17 have been considered for "*driving-related functions*" in considering GPS technology)*; a second processing unit configured to perform a second set of functions* (see Fig. 2, elements 14, 16, 17, 19 and even Fig. 5, element 48 has been considered as second processing unit; Note that cellular telephone 16, GPS 17, card reader 19, vehicle engine computer 14, are themselves separate computers. These separate computers located within the vehicle for performing different tasks, and are connected to main computer 18)*; a data transfer connection between the first and second processing units* (see Fig. 2, elements 16 and 17, and Fig. 5, element 48, wherein the second computer performs different task as noted above)*; and the system configured to distribute the second set of functions exclusively to the second processing unit* (see Fig. 2, element 18, 14, 16, 17, Fig. 3 and Fig. 5, elements 13 and 15 being taken as exclusive of element 48).

However, Kelly is silent as to the specifics of at least one driving-related function is temporarily distributed to the second computer for execution.

Ellenby discloses a computer system in a vehicle where at least one driving-related function is temporarily distributed to a second computer for execution (col 6, line

59-64). Ellenby teaches that this is so the main CPU can perform its other tasks, which would normally be underserved if the processor-intensive driving-related function is done (col 6, line 60-62).

It would have been obvious to one of ordinary skill in the art to provide Kelly with Ellenby in order to allow the main CPU to properly perform other tasks, as taught by Ellenby.

As per claim 24, Kelly et al., 2003/0195676 teaches a system *wherein the system is configured to modify the second set of functions based on user input* (see Figs. 2-3, particularly elements 18, 14, 16 and 17 of figure 2)*, and wherein the system is configured to restrict modification of the driving-related functions* (see Fig. 2, elements 18, 14, 16 and 17).

As per claim 25, Kelly et al., 2003/0195676 teaches a system *wherein the second processing unit is a receiving subsystem with an interface configured to interface with a plurality of equipment added to the system via the interface* (see Fig. 3, elements 16 and 17).

As per claim 26, Kelly et al., 2003/0195676 teaches a system *wherein the second sets of functions include enhancements of the driving-related functions* (see Fig. 3, elements 16 and 17).

As per claim 27, Kelly et al., 2003/0195676 teaches a system *wherein one enhancement includes interactive graphical maps* (see Figs. 2-3, element 17 and Fig. 5, element 17 has been considered as means for displaying graphical maps)*, and wherein one driving-related function, associated with the one enhancement, includes basic navigation data* (see Figs. 2-3, elements 17).

As per claim 28, Kelly et al., 2003/0195676 teaches a system *wherein the first processing unit is configured as a master processing unit and the second processing unit is configured as a slave processing unit* (see Fig. 2, element 18 as the master and elements 14, 16, 18 and 19 have been considered as slave).

As per claim 29, Kelly et al., 2003/0195676 teaches a system *wherein the second processing unit is configured with more processing power than the first processing unit* (see fig. 3, and such limitation does not have any patentable weight, for it is a design choice).

As per claim 30, Kelly et al., 2003/0195676 teaches a system *wherein the second processing unit is optimized for multimedia processing* (see Fig. 3).

As per claim 31, Kelly et al., 2003/0195676 teaches a system *wherein the system is configured to modify the second set of functions based on user input* (see Figs. 2-3, particularly elements 18, 14, 16 and 17 of figure 2)*, wherein the system is configured to restrict modification of the driving-related functions* (see Fig. 2, elements 18, 14, 16 and 17)*, wherein the second processing unit is a receiving subsystem with an interface configured to interface with a plurality of equipment added to the system via*

the interface (see Figs. 2-3, as noted above), *wherein the second set of functions include enhancements of the driving-related functions* .

As per claim 32, Kelly et al., 2003/0195676 teaches a system *wherein one enhancement includes interactive graphical maps* (see Fig. 2, element 17 and Fig. 3, element 17, have been considered as means for displaying graphical maps), *and wherein one driving-related function, associated with the one enhancement, includes basic navigation data* (see Fig. 2, elements 16 and 17), *wherein the first processing unit is configured as a master* (see Fig. 2, element 18) *processing unit and the second processing unit is configured as a slave processing unit* (see Fig. 2, elements 14, 16, 17 and 19, as noted above), *wherein the second processing unit is configured with more processing power than the first processing unit* (see Fig. 2, elements 14, 16, 17 and 19, as noted above by design choice; Note that the secondary computers have considered having extra batteries), *and wherein the second processing unit is optimized for multimedia processing* (see Figs.2 and 3 as noted above).

As per claim 33, Kelly et al., 2003/0195676 teaches a *computer system in a vehicle* (see Figs. 1, 2, and 5, element 18), *comprising: a graphics processor* (see fig. 3, elements 16 and 17); *and at least two computers that perform different tasks* (see Fig. 2, elements 18 and 14, 16, 17, 19 and Fig. 5, element 48, wherein two computers system that performs different task), *a distribution of the tasks among the at least two computers being performed in accordance with a significance of functions for guidance of the vehicle* (see Fig. 2, elements 16 and 17), *wherein a first one of the computers includes functions related to driving* (see Fig. 18), *wherein a second one of the*

computers includes functions not related to driving (see Fig. 2, element 19), *wherein the computers are connected to the graphics processor, and wherein the computers communicate with each other via one predefined interface* (see Fig. 3, section [0048]).

However, Kelly is silent as to the specifics of at least one driving-related function is temporarily distributed to the second computer for execution.

Ellenby discloses a computer system in a vehicle where at least one driving-related function is temporarily distributed to a second computer for execution (col 6, line 59-64). Ellenby teaches that this is so the main CPU can perform its other tasks, which would normally be underserved if the processor-intensive driving-related function is done (col 6, line 60-62).

It would have been obvious to one of ordinary skill in the art to provide Kelly with Ellenby in order to allow the main CPU to properly perform other tasks, as taught by Ellenby.

As per claims 34 and 35, Kelly et al., 2003/0195676 teaches a *computer system in a vehicle* (see Fig. 1), *comprising: a graphics processor* (see Fig 1, element 18); *and*

at least two computers that perform different tasks (see Fig. 1, elements 14, 18 has shown clear evidence of two computers in the vehicle; and Fig. 2, element 18 for the first computer, and any of elements 14, 16, 17, 19 of figure 2, have been taken as

the second computer which being considered perform different tasks), *a distribution of the tasks among the at least two computers being performed in accordance with a significance of functions for guidance of the vehicle* (see Fig. 2, elements 16 and 17),

wherein a first one of the computers includes functions related to driving (see Fig. 2, elements 14 and 18), *wherein a second one of the computers includes functions not related to driving* (see Fig. 2, elements 16 and 17, as noted above),

wherein the computers are connected to the graphics processor, wherein the computers communicate with each other via one predefined interface (see Figs. 2 and 3 as noted above), *and*

wherein the first one of the computers is a closed system, the second one of the computers is an open system (see Fig. 2, element 18 has taken as closed and elements 16 and 17 have been taken as open), *and the open system permits a user to make changes to software or to a configuration* (see Figs. 2-3, element 16 and 18 being known for user's manipulation of any form of fashion *etc.*).

However, Kelly is silent as to the specifics of at least one driving-related function is temporarily distributed to the second computer for execution.

Ellenby discloses a computer system in a vehicle where at least one driving-related function is temporarily distributed to a second computer for execution (col 6, line 59-64). Ellenby teaches that this is so the main CPU can perform its other tasks, which would normally be underserved if the processor-intensive driving-related function is done (col 6, line 60-62).

It would have been obvious to one of ordinary skill in the art to provide Kelly with Ellenby in order to allow the main CPU to properly perform other tasks, as taught by Ellenby.

3. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly, in view of Ellenby, further in view of Fast (5,497,149).

As per claim 15, Kelly et al., 2003/0195676 teaches essential features of the invention substantially as claimed, but fails to teach explicitly a system *wherein the non-driving-related functions are entertainment-specific functions.*

Fast teaches a commonly well-known integrated navigation/communication/entertainment system for use in a vehicle (col 11, line 52-55).

It would have been obvious to one of ordinary skill in the art to provide Kelly with Fast's teaching since combining systems would likely reduce weight/components/complexity, etc.

Response to Arguments

4. Applicant's arguments with respect to claims 12-35 have been considered but are moot in view of the new ground(s) of rejection. However, in view of new grounds of rejection, it is obvious that transferring processing intensive functions from a main computer to an auxiliary computer is not new. Personal computers have done so for many years by using a graphics accelerator to render 3D objects while the main

computer focuses on other functions with which it is more effective at. Applicant's disclosure is basically a graphics accelerator in a car computer (e.g. rendering 3D structures in navigation maps, see paragraph [0017] in Applicant's publication). Any sort of permutation of driving-related, non-driving related, main CPU, auxiliary CPU worksharing would further be a matter of design choice once one of ordinary skill in the art decides to use an auxiliary computer to take up computer-intensive tasks. Additionally, combined GPS/entertainment units are obvious.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS KISWANTO whose telephone number is (571)270-3269. The examiner can normally be reached on Monday - Friday, 10AM - 7PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on (571) 272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Q. Nguyen/

Supervisory Patent Examiner, Art Unit 3665